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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,369	09/11/2003	Kazuhiko Yanagawa	HITA.0434	3014
38327	7590	10/15/2004	EXAMINER	
REED SMITH LLP			QI, ZHI QIANG	
3110 FAIRVIEW PARK DRIVE, SUITE 1400			ART UNIT	
FALLS CHURCH, VA 22042			PAPER NUMBER	
			2871	

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/659,369

Applicant(s)

YANAGAWA ET AL.

Examiner

Mike Qi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/106,954.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/11/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-5, 7-12 and 14-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1-5 and 7-12, "a black matrix with projection portion at center region in
or "a projected portion of the black matrix at center region in the pixel", and "the black
matrix is isolated from other black matrix in the pixel" cannot be found any description in
the specification and the corresponding drawings. The specification does not describe
where is the projected portion of the black matrix located at center region of the pixel,
how the black matrix being isolated from other black matrix in the pixel, and where is the
projected portion that is parallel portion with another side of the black matrix where
faced to the parallel portion, and where is the another edge of the black matrix with

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obtuse angle, and where is a length of the spacer, where is a length of the projected portion, where is a width of the spacer, where is a width of the projected portion. The specification does not describe how a length of the spacer is shorter than a length of the projected portion and how a width of the spacer is narrower than a width of the projected portion, and where that can be found in the specification and the corresponding drawings. That would be new matters to this continuation of application.

For examination purpose, the limitations as claimed in claims 1-5 and 7-12 such as “a projected portion of the black matrix at center region in the pixel”, “the black matrix is isolated from other black matrix in the pixel”, “the projected portion having parallel portion with another side of the black matrix where faced to the parallel portion”, “a length of the spacer is shorter than a length of the projected portion and a width of the spacer is narrower than a width of the projected portion”, “a length of the parallel portion is longer than a length of the spacer”, “the parallel portion is connected to another edge of the black matrix with obtuse angle” were not given any patentable weight.

Claims 14-17, “the black matrix having first edge and fifth edge” that is not clear which one is first edge and which one is fifth edge, and “the projected portion having second edge connected to the first edge with obtuse angle, having third edge connected to the second edge with obtuse angle, having fourth edge connected to the third edge with obtuse angle, and the fourth edge is connected to the fifth edge with obtuse angle” and “the black matrix is isolated with other black matrix in the pixel” that cannot not be found any description in the specification and corresponding drawings. The specification does not describe where is the first edge and fifth edge of the black matrix and where is

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the second edge, third edge and fourth edge, and how they are connected with obtuse angle, and where that can be found in the specification and the corresponding drawings. That would be new matters to this continuation of application.

For examination purpose, the limitations as claimed in claims 14-17 such as “the black matrix having first edge and fifth edge”, “the projected portion having second edge, third edge, fourth edge”, and “the black matrix is isolated with other black matrix in the pixel” were not given any patentable weight.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,097,467 (Fujimaki et al).

Claims 1-5, 7-12 and 14-17, Fujimaki discloses (col.4, line 65 – col.5, line 63;

Figs.1B, 2-7) that a liquid crystal display device comprising:

- a pair of substrate (1,13);
- a plurality of drain line (5) and a plurality of gate lines (4);
- a plurality of pixels formed as surrounded region by adjoining drain lines (5) and by adjoining gate lines (4);

- a black matrix (23) elongated along eight of the drain line (5) and the gate line (4) with projected portion (19) that functions as a spacer (see Figs. 2 and 7); so that a spacer (19) arranged at the projected portion.

Claims 6,13 and 18, the limitations are such that the display device is liquid crystal display device, that are only given weight as intended use as the liquid crystal display device can be used in any display device, and Fujimaki also discloses that the display device is liquid crystal display device.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

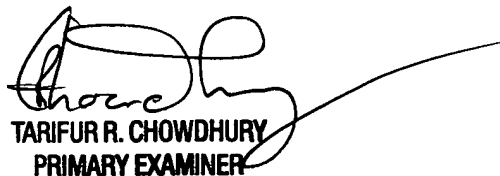
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Qi whose telephone number is (571) 272-2299.

The examiner can normally be reached on M-T 8:00 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Qi
October 12, 2004



TARIFUR R. CHOWDHURY
PRIMARY EXAMINER